

**REMARKS**

Early and favorable reconsideration of this application is respectfully requested in view of the following remarks.

Claims 1, 2 and 4-32 are pending in the present application; all have been rejected. Claims 1, 10, 20 and 22 have been amended for clarification and/or to correct a typographical error; no new matter has been added by this amendment.

The Examiner rejected claims 1, 2, and 4-32 under 35 U.S.C. §112, second paragraph, as being indefinite for failing to point out and distinctly claim the subject matter regarded as the invention. Specifically, the Examiner objected to the characterization that the barrier layer could be between the second substrate and the laser incident surface because, in some embodiments, the barrier layer is the laser incident surface.

This rejection is respectfully traversed. Clearly, even if the barrier layer is the outer-most layer of a disc, the barrier layer is going to be between the reactive layer and the laser incident surface of said disc, i.e., the surface that a laser will strike, even if that surface is, in fact, the outer surface of the barrier layer. Moreover, the Examiner's position ignores those embodiments wherein the barrier layer is not the laser incident surface. Support for such an embodiment, for example, is set forth in Figures 9-13 and 15. Thus, it is respectfully submitted such a limitation is, in fact, sufficiently definite and adequately points out and claims the subject matter regarded as the invention.

The Examiner also asserts the data storage layer should be on the side of the reflective layer opposite the first substrate; however, this is not required. As noted in the specification on page 16 at paragraphs 0056 and 0057:

The data layer(s) for an optical application typically is pits, grooves, or combinations thereof on the first substrate layer. Preferably, the data layer is embedded in the first substrate surface. Typically, an injection molding-compression technique produces the first substrate where a mold is filled with a molten polymer as defined herein. The mold may contain a preform, insert, etc. The polymer system is cooled and, while still in at least partially molten state, compressed to imprint the desired surface features, for example, pits and grooves, arranged in spiral concentric or other orientation onto the desired portions of the first substrate, i.e., one or both sides in the desired areas.

The reflective layer is then applied to the first substrate so that the data layer is disposed between the first substrate and the reflective layer.

Moreover, while the Examiner asserts the only case disclosed bounded by the claims is where the barrier layer is the outer layer is incorrect; as noted above, the barrier layer may be located between the substrates (see Figures 9-13 and 15). Thus, it is respectfully submitted such a limitation is, in fact, sufficiently definite and adequately points out and claims the subject matter regarded as the invention.

Claims 1, 20 and 22 have been amended to address the other objections of the Examiner with respect to the reactive layer.

The Examiner has rejected claims 1, 2, and 4-32 under 35 U.S.C. §103(a) as unpatentable over U.S. Patent Application Publication No. 2003/0198892 to Ezbiensky et al. (hereinafter

Ezbiansky '892), U.S. Patent No. 6,790,501 to van de Grampel et al. (hereinafter van de Grampel '501), U.S. Patent Application Publication No. 2003/0205323 to Ezbiansky et al. (hereinafter Ezbiansky '323), or U.S. Patent No. 6,866,909 to Wisnudel et al. (hereinafter Wisnudel '909), in view of Akiyama et al. JP 60-261046 (hereinafter Akiyama '046) or Akiyama et al. JP 60-256944 (hereinafter Akiyama '944).

This rejection is respectfully traversed. Nowhere does Ezbiansky '892 disclose or suggest a limited play optical storage media including a first substrate, a reactive layer comprising at least one reactive material disposed on said at least one reflective layer, an adhesive layer incorporated into the reactive layer or provided as a separate layer between the reactive layer and the second substrate, an optically transparent second substrate disposed between the reactive layer and a laser incident surface of the optical storage media, and an oxygen permeable barrier layer disposed between said second substrate and a laser incident surface of the optical storage media, said reactive layer having an initial percent reflectivity of about 50% or greater and a percent reflectivity of about 45% or less after exposure oxygen as recited in amended claim 1. Similarly, nowhere does Ezbiansky '892 disclose or suggest a limited play optical storage media having such a configuration utilizing polymethylmethacrylate/leuco methylene blue in the reactive layer as recited in claim 20. Finally, nowhere does Ezbiansky '892 disclose or suggest a method for limiting access to data disposed on a data storage media including a barrier layer, an optically transparent second substrate, a reactive

layer, and an adhesive layer incorporated into the reactive layer or provided as a separate layer between the reactive layer and the second substrate, to reach a reflective layer applied to a first substrate having a data storage layer therebetween and reflecting at least a portion of said light back through said layers and reducing the percent reflectivity of the reactive layer to less than about 45% after exposure to oxygen as recited in claim 22.

While Ezbiansky '892 discloses limited play data storage media, and the use of UV-curable adhesives in such media to adhere various layers of the media together, nowhere does Ezbiansky '892 disclose or suggest the use of an adhesive layer and a separate barrier layer as recited in claims 1, 20, and 22. Without such disclosure, Ezbiansky '892 fails to anticipate claims 1, 2, 4-7, 11-27 and 29-32, and withdrawal of this rejection is respectfully requested.

Like Ezbiansky '892 discussed above, nowhere does Ezbiansky '323 disclose or suggest a limited play optical storage media including a first substrate, a reactive layer comprising at least one reactive material disposed on said at least one reflective layer, an adhesive layer incorporated into the reactive layer or provided as a separate layer between the reactive layer and the second substrate, an optically transparent second substrate disposed between the reactive layer and a laser incident surface of the optical storage media, and an oxygen permeable barrier layer disposed between said second substrate and a laser incident surface of the optical storage media, said reactive layer having an initial percent reflectivity of about 50% or greater and a percent reflectivity of about 45% or less after exposure oxygen as recited in amended claim 1.

Similarly, nowhere does Ezbiansky '323 disclose or suggest a limited play optical storage media having such a configuration utilizing polymethylmethacrylate/ leuco methylene blue in the reactive layer as recited in claim 20. Finally, nowhere does Ezbiansky '323 disclose or suggest a method for limiting access to data disposed on a data storage media including a barrier layer, an optically transparent second substrate, a reactive layer, and an adhesive layer incorporated into the reactive layer or provided as a separate layer between the reactive layer and the second substrate, to reach a reflective layer applied to a first substrate having a data storage layer therebetween and reflecting at least a portion of said light back through said layers and reducing the percent reflectivity of the reactive layer to less than about 45% after exposure to oxygen as recited in claim 22.

While Ezbiansky '323 discloses limited play data storage media, and the use of UV-curable adhesives in such media to adhere various layers of the media together, nowhere does Ezbiansky '323 disclose or suggest the use of an adhesive layer and a separate barrier layer as recited in claims 1, 20, and 22. Without such disclosure, Ezbiansky '323 fails to anticipate claims 1, 2, 4-7, 11-27 and 29-32, and withdrawal of this rejection is respectfully requested.

Similarly, like the Ezbiansky references discussed above, nowhere does van de Grampel '501 disclose or suggest a limited play optical storage media including a first substrate, a reactive layer comprising at least one reactive material disposed on said at least one reflective layer, an adhesive layer incorporated into the reactive layer or provided as a separate layer between the

reactive layer and the second substrate, an optically transparent second substrate disposed between the reactive layer and a laser incident surface of the optical storage media, and an oxygen permeable barrier layer disposed between said second substrate and a laser incident surface of the optical storage media, said reactive layer having an initial percent reflectivity of about 50% or greater and a percent reflectivity of about 45% or less after exposure oxygen as recited in amended claim 1. Similarly, nowhere does van de Grampel '501 disclose or suggest a limited play optical storage media having such a configuration utilizing polymethylmethacrylate/leuco methylene blue in the reactive layer as recited in claim 20. Finally, nowhere does van de Grampel '501 disclose or suggest a method for limiting access to data disposed on a data storage media including a barrier layer, an optically transparent second substrate, a reactive layer, and an adhesive layer incorporated into the reactive layer or provided as a separate layer between the reactive layer and the second substrate, to reach a reflective layer applied to a first substrate having a data storage layer therebetween and reflecting at least a portion of said light back through said layers and reducing the percent reflectivity of the reactive layer to less than about 45% after exposure to oxygen as recited in claim 22.

While van de Grampel '501 discloses limited play data storage media, and the use of UV-curable adhesives in such media to adhere various layers of the media together, nowhere does van de Grampel '501 disclose or suggest the use of an adhesive layer and a separate barrier layer as recited in claims 1, 20, and 22. Without such disclosure, van de Grampel '501 fails to

anticipate claims 1, 2, 4-7, 11-27 and 29-32, and withdrawal of this rejection is respectfully requested.

Wisnudel '909 similarly fails to anticipate or render obvious the pending claims. nowhere does Wisnudel '909 disclose or suggest a limited play optical storage media including a first substrate, a reactive layer comprising at least one reactive material disposed on said at least one reflective layer, an adhesive layer incorporated into the reactive layer or provided as a separate layer between the reactive layer and the second substrate, an optically transparent second substrate disposed between the reactive layer and a laser incident surface of the optical storage media, and an oxygen permeable barrier layer disposed between said second substrate and a laser incident surface of the optical storage media, said reactive layer having an initial percent reflectivity of about 50% or greater and a percent reflectivity of about 45% or less after exposure oxygen as recited in amended claim 1. Similarly, nowhere does Wisnudel '909 disclose or suggest a limited play optical storage media having such a configuration utilizing polymethylmethacrylate/ leuco methylene blue in the reactive layer as recited in claim 20. Finally, nowhere does Wisnudel '909 disclose or suggest a method for limiting access to data disposed on a data storage media including a barrier layer, an optically transparent second substrate, a reactive layer, and an adhesive layer incorporated into the reactive layer or provided as a separate layer between the reactive layer and the second substrate, to reach a reflective layer applied to a first substrate having a data storage layer therebetween and reflecting at least a



portion of said light back through said layers and reducing the percent reflectivity of the reactive layer to less than about 45% after exposure to oxygen as recited in claim 22.

While Wisnudel '909 discloses various configurations of limited play data storage media, and various layers utilized in the construction of such media, Wisnudel '909 does not provide the oxygen permeable barrier layer recited in claims 1, 20 and/or 22. Without such disclosure, Wisnudel '909 fails to anticipate or render obvious applicants' claims.

Neither Akiyama '046 nor Akiyama '944 cure the deficiencies of Ezbiansky '892, van de Grampel '501, Ezbiansky '323 and/or Wisnudel '909, no matter how these references may be combined.

While Akiyama '046 discloses a coating over a 2-layer structure, and Akiyama '944 discloses a protective film coating which may be cured, nowhere does Akiyama '046 or Akiyama '944 disclose or suggest a limited play optical storage media including a first substrate, a reactive layer comprising at least one reactive material disposed on said at least one reflective layer, an adhesive layer incorporated into the reactive layer or provided as a separate layer between the reactive layer and the second substrate, an optically transparent second substrate disposed between the reactive layer and a laser incident surface of the optical storage media, and an oxygen permeable barrier layer disposed between said second substrate and a laser incident surface of the optical storage media, said reactive layer having an initial percent reflectivity of about 50% or greater and a percent reflectivity of about 45% or less after exposure oxygen as



recited in amended claim 1. Similarly, nowhere does Akiyama '046 or Akiyama '944 disclose or suggest a limited play optical storage media having such a configuration utilizing polymethylmethacrylate/ leuco methylene blue in the reactive layer as recited in claim 20. Finally, nowhere does Akiyama '046 or Akiyama '944 disclose or suggest a method for limiting access to data disposed on a data storage media including a barrier layer, an optically transparent second substrate, a reactive layer, and an adhesive layer incorporated into the reactive layer or provided as a separate layer between the reactive layer and the second substrate, to reach a reflective layer applied to a first substrate having a data storage layer therebetween and reflecting at least a portion of said light back through said layers and reducing the percent reflectivity of the reactive layer to less than about 45% after exposure to oxygen as recited in claim 22.

The coatings of Akiyama '046 and Akiyama '944 are described as protective coatings – there is no teaching or suggestion that either of these coatings may be considered oxygen permeable barrier layers as recited in claims 1, 20 and/or 22. Without disclosing or suggesting a device having the layers described above and claimed herein, including the oxygen permeable barrier layers of claims 1, 20 and 22, Akiyama '046 and Akiyama '944 fail to remedy the deficiencies of Ezbiansky '892, van de Grampel '501, Ezbiansky '323, and/or Wisnudel '909, no matter how these references are combined, and withdrawal of the rejection of claims 1, 2 and 4-32 is respectfully requested.

The Examiner has next rejected claims 1,2 and 4-32 on the ground of nonstatutory obviousness type double patenting over claims 1-39 of U.S. Patent No. 6,790,501 (van de Grampel '501) in view of Akiyama '046 and Akiyama '944. As noted above, nowhere does van de Grampel '501, Akiyama '046 and/or Akiyama '944 disclose or suggest the media of the present application, including the oxygen permeable barrier layers as recited in claims 1, 20 and/or 22, and withdrawal of this rejection is respectfully requested. However, applicants reserve the right to submit a terminal disclaimer to overcome this rejection upon allowance of the claims in this application.

The Examiner has next rejected claims 1,2 and 4-32 on the ground of nonstatutory obviousness type double patenting over claims 1-39 of U.S. Patent No. 6,866,909 (Wisnudel '909) in view of Akiyama '046 and Akiyama '944. As noted above, nowhere does Wisnudel '909, Akiyama '046 and/or Akiyama '944 disclose or suggest the media of the present application, including the oxygen permeable barrier layers as recited in claims 1, 20 and/or 22, and withdrawal of this rejection is respectfully requested. However, applicants reserve the right to submit a terminal disclaimer to overcome this rejection upon allowance of the claims in this application.

It is believed that the claims of the application, i.e., claims 1, 2 and 4-32, are patentably distinct over the art of record and are in condition for allowance. In the event that the examiner believes that a telephone conference or a personal interview may facilitate resolution of any

Appln. No. 10/657,631  
Filing Date: September 8, 2003  
Docket: 124366-2 (1306-13)  
Page 22 of 22

---

Response to Office Action mailed September 15, 2006

remaining matters, the undersigned may be contacted at the number indicated below. In view of the foregoing amendment and remarks, early and favorable action on this application are earnestly solicited.

Respectfully submitted,



Michael R. Brew  
Registration No. 43,513  
Attorney for Applicants

***Carter, DeLuca, Farrell & Schmidt, LLP***  
445 Broad Hollow Road, Suite 225  
Melville, New York 11747  
Tel.: (631) 501-5700  
Fax: (631) 501-3526  
MRB/nr